

National Functional Guidelines Report #03

Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports

Blanks

Blanks	ICP_AES
ND03	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	PBS57
	Calcium PBS57
Blanks	ICP_AES
ND04	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated at CRQLs.
	PBS57
	Calcium PBS57
Blanks	ICP_AES
ND05	The following samples have analyte results greater than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Calcium LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
Blanks	ICP_AES
ND06	The following samples have analyte results greater than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Calcium LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
Blanks	ICP_AES
NE05	The following samples have analyte results greater than CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.
	LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Calcium LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60

National Functional Guidelines Report #03

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Blanks

Blanks	ICP_MS
ND03	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	MF2B36L, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60, PBS62
	Cobalt MF2B36L
	Beryllium MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Antimony MF2B21, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B48, MF2B51, MF2B54, MF2B57, PBS62
	Thallium MF2B27, MF2B36
Blanks	ICP_MS
ND04	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	MF2B36L, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60, PBS62
	Arsenic MF2B36L
	Cobalt MF2B36L
	Beryllium MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Antimony MF2B21, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B48, MF2B51, MF2B54, MF2B57, PBS62
	Thallium MF2B27, MF2B36
	Cadmium MF2B18, MF2B21, MF2B24, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Silver MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
Blanks	ICP_MS
ND05	The following samples have analyte results greater than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	LCS62, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36S, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60, MF2B36A
	Cobalt LCS62, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36S, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Beryllium LCS62, MF2B36S
	Antimony LCS62, MF2B36A, MF2B36S
	Thallium LCS62, MF2B36S
Blanks	ICP_MS
ND06	The following samples have analyte results greater than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.

National Functional Guidelines Report #03

Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports

Blanks

Blanks	ICP_MS
	LCS62, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B36S, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60, MF2B36A
	Arsenic LCS62 , MF2B33 , MF2B36 , MF2B36D , MF2B36L , MF2B36S
	Cobalt LCS62 , MF2B18 , MF2B21 , MF2B24 , MF2B27 , MF2B30 , MF2B33 , MF2B36 , MF2B36D , MF2B36L , MF2B36S , MF2B39 , MF2B42 , MF2B45 , MF2B48 , MF2B51 , MF2B54 , MF2B57 , MF2B60
	Barium LCS62 , MF2B18 , MF2B21 , MF2B24 , MF2B27 , MF2B30 , MF2B33 , MF2B36 , MF2B36D , MF2B36L , MF2B36S , MF2B39 , MF2B42 , MF2B45 , MF2B48 , MF2B51 , MF2B54 , MF2B57 , MF2B60
	Beryllium LCS62 , MF2B21 , MF2B24 , MF2B27 , MF2B36S
	Antimony LCS62 , MF2B36A , MF2B36S
	Thallium LCS62 , MF2B36S
	Cadmium LCS62 , MF2B21 , MF2B24 , MF2B27 , MF2B36S
	Silver LCS62 , MF2B36S
Blanks	ICP_MS
NE04	The following samples have analyte results greater than or equal to MDLs but less than or equal to CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs. MF2B21, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B48, MF2B51, MF2B54, MF2B57
	Antimony MF2B21 , MF2B30 , MF2B33 , MF2B36 , MF2B36D , MF2B39 , MF2B42 , MF2B48 , MF2B51 , MF2B54 , MF2B57
Blanks	ICP_MS
NE05	The following samples have analyte results greater than CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.
	LCS62, MF2B36A, MF2B36S
	Antimony LCS62 , MF2B36A , MF2B36S

National Functional Guidelines Report #03

Lab MITKEM(Mitkem Laboratories) **SDG** MF2B33 **Case** 43795 **Contract** EPW09039 **Region** 6 **DDTID** 183649 **SOW** ISM01.3

Data Review Reports

Detection Limit

Detection Limit	Hg
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified J.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Mercury MF2B18 , MF2B21 , MF2B24 , MF2B27 , MF2B30 , MF2B33 , MF2B36 , MF2B36D , MF2B39 , MF2B48 , MF2B51 , MF2B54 , MF2B57 , MF2B60

National Functional Guidelines Report #03

Lab MITKEM(Mitkem Laboratories) **SDG** MF2B33 **Case** 43795 **Contract** EPW09039 **Region** 6 **DDTID** 183649 **SOW** ISM01.3

Data Review Reports

Detection Limit

Detection Limit	ICP_AES
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified J.
	PBS57, MF2B36L, MF2B45
	Calcium PBS57
	Potassium MF2B36L , MF2B45
	Magnesium MF2B36L

National Functional Guidelines Report #03

Lab MITKEM(Mitkem Laboratories) **SDG** MF2B33 **Case** 43795 **Contract** EPW09039 **Region** 6 **DDTID** 183649 **SOW** ISM01.3

Data Review Reports

Detection Limit

Detection Limit	ICP_MS
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified J.
	MF2B30, MF2B36L, MF2B45, MF2B18, MF2B21, MF2B24, MF2B27, MF2B33, MF2B36D, MF2B51, MF2B54, MF2B60, MF2B36, MF2B39, MF2B42, MF2B48, MF2B57, PBS62
	Vanadium MF2B30 , MF2B36L , MF2B45
	Arsenic MF2B36L
	Chromium MF2B36L
	Nickel MF2B36L
	Copper MF2B36L
	Lead MF2B36L
	Selenium MF2B18 , MF2B21 , MF2B24 , MF2B27 , MF2B33 , MF2B36D , MF2B51 , MF2B54 , MF2B60
	Cobalt MF2B36L
	Beryllium MF2B18 , MF2B21 , MF2B24 , MF2B27 , MF2B30 , MF2B33 , MF2B36 , MF2B36D , MF2B36L , MF2B39 , MF2B42 , MF2B45 , MF2B48 , MF2B51 , MF2B54 , MF2B57 , MF2B60
	Antimony MF2B21 , MF2B30 , MF2B33 , MF2B36 , MF2B36D , MF2B36L , MF2B39 , MF2B42 , MF2B48 , MF2B51 , MF2B54 , MF2B57 , PBS62
	Cadmium MF2B18 , MF2B21 , MF2B24 , MF2B30 , MF2B33 , MF2B36 , MF2B36D , MF2B39 , MF2B42 , MF2B45 , MF2B48 , MF2B51 , MF2B54 , MF2B57 , MF2B60
	Thallium MF2B27 , MF2B36
	Silver MF2B18 , MF2B21 , MF2B24 , MF2B27 , MF2B30 , MF2B33 , MF2B36 , MF2B36D , MF2B39 , MF2B42 , MF2B45 , MF2B48 , MF2B51 , MF2B54 , MF2B57 , MF2B60

National Functional Guidelines Report #03

Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports

Duplicates

Duplicates	ICP_MS
NI03	The following Duplicate and original sample results are greater than 5xCRQL and RPD is greater than 20. The original sample results are greater than or equal to MDLs. Detected analytes are qualified J. Nondetected analytes are qualified UJ.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Barium MF2B36D
	Zinc MF2B36D
Duplicates	ICP_MS
NI04	The following Duplicate or original sample results are less than or equal to 5xCRQL and the absolute difference between duplicate and original samples are greater than CRQL. The original sample results are greater than or equal to MDLs. Detected analytes are qualified J. Nondetected analytes are qualified UJ.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Nickel MF2B36D
	Copper MF2B36D
	Lead MF2B36D

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Data Review Reports

Holding Times/Preservation

Holding Times/Preservation	Hg
NHT01	The following preserved samples are improperly maintained at temperatures outside the range of 4+/-2 C. Detected analytes with results greater than or equal to MDLs are qualified J-. Use professional judgment to qualify the nondetected analytes.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B39, MF2B42, MF2B45, MF2B51, MF2B54, MF2B57, MF2B60

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Data Review Reports

Holding Times/Preservation

Holding Times/Preservation	ICP_AES
NHT01	The following preserved samples are improperly maintained at temperatures outside the range of 4+/-2 C. Detected analytes with results greater than or equal to MDLs are qualified J-. Use professional judgment to qualify the nondetected analytes.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B39, MF2B42, MF2B45, MF2B51, MF2B54, MF2B57, MF2B60

National Functional Guidelines Report #03

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Data Review Reports

Holding Times/Preservation

Holding Times/Preservation	ICP_MS
NHT01	The following preserved samples are improperly maintained at temperatures outside the range of 4+/-2 C. Detected analytes with results greater than or equal to MDLs are qualified J-. Use professional judgment to qualify the nondetected analytes.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B39, MF2B42, MF2B45, MF2B51, MF2B54, MF2B57, MF2B60

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Data Review Reports

Matrix Spikes

Matrix Spikes	ICP_MS
NG08	The following Matrix Spike samples have percent recoveries less than 30% and post-digestion spike samples have percent recoveries greater than or equal to 75%. Detected analytes with results greater than or equal to MDLs are qualified J. Nondetected analytes are qualified UJ.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Antimony MF2B36S

National Functional Guidelines Report #03

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Data Review Reports

Serial Dilution

Serial Dilution	ICP_MS
NL032	The following ICP-MS Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. The detected analytes in samples with results greater than or equal to MDLs are qualified J. Nondetected analytes in samples are qualified UJ.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Chromium MF2B36L